

# Bald Eagle

## Description:

The bald eagle's scientific name means "sea eagle with a white head." The bird is called "bald" because the Old English word for white was "balde." This eagle is the only eagle unique to North America. The bald eagle was chosen for our national bird in spite of the fact that Benjamin Franklin originally opposed the decision due to habits of stealing from other birds of prey and scavenging dead animals.

## Are They Really Bald?

Even though they are called bald, these eagles are actually completely covered with feathers. The most distinctive feature of an adult is the collection of white head feathers. These feathers form a white-feathered, or "bald", head on a large, brown body. Both male and female bald eagles look alike except that the female is usually larger than the male. It takes time to go bald; it doesn't happen overnight! Adult eagles do not get their characteristic white head and tail until they are four to five years old. Young bald eagles are mainly brown with a lot of white spotting on their undersides. As the bird matures, this spotting fades until the body is brown and the head and tail become white. The dark eyes and beak of the young eagle lighten to pale yellow as they become adults.

## What's that Squeaking Noise?

Since eagles do not have vocal cords, the bald eagle's voice resembles squeaky cackling and thin squeals. (sound bytes here) The sound most people associate with the bald eagle actually belongs to the red-tailed hawk. (sound byte here) Bald eagles use their calls as a way of reinforcing the bond between the male and female, communicating with their young, and as a warning to other eagles that the area is defended.

## How Does Such a Big Bird Fly?

In flight, the bald eagle flaps infrequently and holds its large rounded wings flat while soaring high on air thermals. Both sexes have large wingspans of up to six-feet wide which allow them to easily soar in the air. Despite their large size, bald eagles weigh only 10 to 15 pounds thanks to a lightweight skeleton. A bald eagle's skeleton weighs about half a pound and is only five or six percent of its total weight. The feathers weigh twice that much. Eagle bones are light because they are hollow. The beak, talons, and feathers are made of light-weight keratin just like your hair and fingernails.

## What Else Could it Be?

An adult bald eagle is unmistakable. Young birds without the white head can be easily mistaken for the similar golden eagle. Adult golden eagles are sometimes larger than bald eagles but are uniformly brown with golden feathers on the back of the head and neck. Young golden eagles also have a large white patch on the underside of both wings and the tail. Bald eagles favor habitats near water while golden eagles are most often found in drier areas. During winter, both species can be found together feeding on dead animals.

## Building a Big Home

The nest of a bald eagle is the largest nest of any North American bird; it can be more than six feet tall, 15 - 20 feet wide, and may weigh up to 2000 pounds. That's bigger than most cars! This massive nest of sticks is usually built in the top of a tall tree. The reason these nests can be so large is that bald eagle pairs will return to the same nest each year and add new nesting materials on top of last year's. Bald eagles prefer habitat associated with water that will supply fish and waterfowl. Such habitats can vary from large lakes and rivers to quiet ponds and streams.

## Meat Eaters

The bald eagle is an opportunistic feeder. Ninety percent of their diet is fish, birds and mammals. Dead or dying fish are an important food source for bald eagles. They seize fish by swooping to the water's surface as well as stealing them from osprey or other eagles. These birds will also scavenge nearby dead animals, including road kill and carcasses left by other predators.

## Top of the Food Chain

Bald eagles are usually at the top of the food chain. They are most vulnerable when in the nest where other birds of prey such as great horned owls might find them. Their first year of life on their own is also a dangerous time when young birds hone their hunting and survival skills.

## Adapted for High Flying

As many as 7,000 strong, lightweight feathers protect a bald eagle from the cold as well as from the heat of the sun. By trapping layers of air, feathers provide insulation in addition to waterproofing. The tips of the feathers are tapered so that when the eagle fully extends its wings, they are widely separated like fingers to provide maximum surface area when soaring. Eagles are able to conserve energy by using rising currents of warm air called "thermals." Eagles can use thermals to save energy on long-distance migration flights. The eagle's long, broad wings make them highly effective for soaring. Even the tail is very important for flight and maneuvering. It acts as a brake when the eagle needs to come in for a landing.

Because the eagle's beak and talons are made of keratin, the same substance as our hair and fingernails, they grow continuously and are able to withstand extremely cold temperatures. A bald eagle's beak is a strong weapon, but is also delicate enough to groom a mate's feathers or feed a small portion of food to a newly-hatched chick. The razor sharp hook at the tip of the eagles' beak is used for tearing. Talons (feet) are important tools for hunting and defense.

## Little Balls of Fluff

Every year, the female lays two or three bluish-white eggs which both parents take turns incubating for up to 35 days. Very young bald eagles are cute little round balls of white fluff with huge feet. They rapidly grow into gangly youngsters with mottled brown and white feathers. Flight practice begins around three months of age when the youngsters stand on the nest and flap their wings to exercise them. Shortly afterwards, the first flight is made and they begin flight training in earnest and are soon on their own. Bald eagles find a mate when they are four to six years old. Once paired,



Bald Eagle  
© Joe Fuhrman

No Footprint  
Footprint

No Map  
Distribution Map

1. **Species:** Bald Eagle
2. **Scientific Name:** *Haliaeetus leucocephalus*
3. **Population:**
4. **Size:** Weight: 10-14 lbs.  
Length: Female - 35 to 37 inches.  
Length: Male - 30 to 34 inches.  
Wingspan: Female - 79 to 90 inches.  
Wingspan: Male - 72 to 85 inches.
5. **Diet:** Fish, birds, mammals, carrion.
6. **Young:** 2-3 per year; called eaglets.
7. **Lifespan:** 15-20 years.
8. **Taxonomy:** Kingdom: Animalia  
Phylum: Chordata  
Class: Aves  
Order: Ciconiiformes  
Family: Accipitridae
9. **Hunted In Idaho:** No
10. **Hunting Link:**

bald eagles remain together until one dies, at which time the survivor will not hesitate to accept a new mate.

#### **Do Eagles Travel?**

Eagles are well adapted to cold environments. They travel or "migrate" depending on the availability of food. If it is particularly cold, they may head farther south to find open water in order to fish. If, however, the eagles can find enough carcasses to scavenge, they may remain through a cold snap.

#### **Not as Many as Before**

The bald eagle was on the U.S. Endangered Species List but is now listed as "threatened" throughout all the United States except Alaska. Our national bird suffered a dramatic decline caused by ingestion of a chemical called DDT. This chemical was sprayed on crops to prevent insect damage. Unfortunately, this deadly poison found its way into the food chain. It was absorbed by plants and small animals that were in turn eaten by the fish that the eagles fed upon. DDT made eggshells very thin and weak. Eggs cracked during normal incubation and embryos died. Eagle populations began a drastic decline. Fortunately, people realized the dangers of DDT to not only wildlife like eagles, but also to humans. In 1972, DDT was outlawed. This ,along with protection of eagles and eagle habitat, has allowed our national symbol to once again soar over our skies in healthy numbers.

The bald eagle is found over most of North America from Alaska and Canada to northern Mexico. In Idaho, there are an estimated one thousand pairs of bald eagles. About half of the world's 70,000 bald eagles live in Alaska. Combined with British Columbia's population of about 20,000, the northwest coast of North America is by far the bald eagle's greatest stronghold. They flourish in Idaho partly because of salmon as a food source.